

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with T. Pienkos on 22 April 2010.

The application has been amended as follows:

For the specification:

Page 21, line 4 of the specification as filed 31 March 2004, insert as a separate paragraph (after the paragraph ending in "into the desired location underneath a structure"):

With reference to the teachings herein, including at least Figures 6A, 9 and 14-18, it is apparent that at least one of the joists is to be connected with at least one of the hubs using a pin to provide free rotation of the at least one joist with respect to the at least one hub about the pin. Moreover, it is apparent that the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of

a work platform when the platform is positioned with respect to the hubs and the joists in the final position.

For the claims:

5. (Previously Presented) The system of claim 11, further comprising a suspension connector that is to be operatively attached to at least one of said plurality of hubs.

6. (~~Previously Presented~~) Currently Amended) The system of claim 11, further wherein ~~said plurality of the hubs and the joists and plurality of hubs are capable of being articulated from a first position to a second position~~ are interconnected.

11. (~~Previously Presented~~) Currently Amended) A work platform support system comprising:

a plurality of joists; and

a plurality of hubs;

wherein the plurality of joists comprises four joists and wherein the plurality of hubs comprises four hubs;

wherein the joists and hubs are configured to be interconnected so that: i) one of the joists and two of the hubs are to remain stationary; ii) two of the joists are rotatable; and iii) two of the hubs and one of the joists are translatable; ==

wherein the joists and hubs are to be interconnected so that the two rotatable joists, the two translatable hubs, and the one translatable joist can articulate from an initial position to a

final position with respect to the stationary joist and the stationary hubs ~~so as to receive a work platform;~~

wherein the plurality of joists are substantially co-planar with respect to each other in the initial and the final position;

wherein at least one of the joists is to be connected with at least one of the hubs using a pin ~~such that~~ to provide free rotation of the at least one joist and with respect to the at the least one hub are freely rotatable about the pin; and

wherein the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when the platform is positioned with respect to the hubs and the joists in the final position.

19. (Currently Amended) The system of claim 13, wherein said first surface and said second surface ~~interconnect~~ are configured to be interconnected with said at least one joist.

23. (~~Previously Presented~~ Currently Amended) A work platform support system comprising:

at least four hubs; and

at least four joists, each of the four joists are configured to be interconnected with at least two of the four hubs; and

wherein the joists and the hubs are configured to be interconnected so that: i) one of the joists ~~and two of the hubs are~~ configured to remain stationary; ii) two of the joists ~~are~~

rotatable; and iii) two of the hubs-and one of the joists-are translatable;

wherein, when interconnected, the two rotatable joists, the two translatable hubs, and the one translatable joist can articulate from an initial position to a final position with respect to the stationary joist and the stationary hubs ~~so as to receive a work platform;~~

wherein the at least four joists-are substantially co-planar with respect to each other in the initial and the final positions; ~~and~~

wherein at least one of the joists is configured to be connected with at least one of the hubs using a pin ~~such that to~~ provide free rotation of the at least one joist ~~and~~ with respect to ~~the at the least one hub are freely rotatable about the pin; and~~

wherein the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when the platform is positioned with respect to the hubs and the joists in the final position.

24. (~~Previously Presented~~Currently Amended) A work platform support system for suspending a work platform from a structure, said system comprising:

a plurality of joists;

at least one of a plurality of hubs for interconnecting at least two of said plurality of joists; and

a suspension connector for suspending at least one of the plurality of joists and at least one of the plurality of hubs from a structure;

wherein the plurality of joists comprises four joists and wherein the plurality of hubs comprises four hubs;

wherein the joists and hubs are configured to be interconnected so that: i) one of the joists and two of the hubs are to remain stationary; ii) two of the joists are rotatable; and iii) two of the hubs and one of the joists are translatable;

wherein, when interconnected, the two rotatable joists, the two translatable hubs, and the one translatable joist can articulate from an initial position to a final position with respect to the stationary joist and the stationary hubs ~~so as to receive a work platform;~~

wherein the plurality of joists are substantially coplanar with respect to each other in the initial and the final positions; and

wherein at least one of the joists is configured to be connected with at least one of the hubs using a pin ~~such that to~~ provide free rotation of the at least one joist ~~and with respect to the~~ at the least one hub ~~are freely rotatable~~ about the pin; and

wherein the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when

the platform is positioned with respect to the hubs and the joists in the final position.

30. (~~Previously Presented~~Currently Amended) A work platform support structure comprising:

a first hub ~~connected~~connectable in fixed relation to a second hub using a first joist; and

a third hub ~~connected~~connectable to a fourth hub using a second joist, the third and the fourth hubs further ~~connected~~connectable to the first and the second hubs using third and fourth joists;

wherein, when connected, the second, the third and the fourth joists, and the third and the fourth hubs articulate from an initial position to an extended position with respect to the first and second hubs and the first joist ~~to receive and support a work platform;~~

wherein, when connected, each of the first, second, third and the fourth joists extends substantially perpendicularly with respect to an axis of at least one of the respective first, second, third and fourth hubs about which the respective joists rotate;

wherein the first, second, third and the fourth joists are substantially co-planar with respect to each other in the initial and the extended positions;

wherein at least one of the joists is to be connected with at least one of the hubs using a pin ~~such that~~to provide free rotation of the at least one joist ~~and with respect to the~~ at the least one hub ~~are freely rotatable~~ about the pin; and

wherein the free rotation is restricted by at least one of: i) an additional pin that is configured to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when the platform is positioned with respect to the hubs and the joists in the extended position.

31. (~~Previously Presented~~Currently Amended) The work platform support structure of claim 30 wherein at least one of the second, the third and the fourth joists rotates with respect to at least one of the first hub and the second hub.

32. (~~Previously Presented~~Currently Amended) The work platform support structure of claim 30 wherein, when connected, at least one of the second, the third and the fourth joists translates with respect to at least one of the first joist, the first hub and the second hub.

33. (~~Previously Presented~~Currently Amended) The work platform support structure of claim 30 wherein, when connected, at least one of the second, the third and the fourth joists pivots with respect to at least one of the third hub and the fourth hub.

34. (~~Previously Presented~~Currently Amended) A work platform support structure comprising:

a first pair of hubs ~~connected~~connectable in fixed relation to each other using a first joist; and

a second pair of hubs ~~connected~~connectable to each other using a second joist, the second pair of hubs further ~~connected~~connectable to the first pair of hubs using third and fourth joists;

wherein, when connected, the second, the third and the fourth joists and the second pair of hubs articulate from an initial position to a final position with respect to the first pair of hubs and the first joist ~~to receive and support a work platform;~~

wherein, when connected, each of the first, second, third and the fourth joists extends substantially perpendicularly with respect to an axis of at least one of the respective hubs in the first and the second pair of hubs about which the respective joists rotate; and

wherein the first, second, third and the fourth joists are substantially co-planar with respect to each other in the initial and the final positions;

wherein at least one of the joists is configured to be connected with at least one of the hubs using a pin ~~such that to provide free rotation of the at least one joist and with respect to the~~ at the least one hub are freely rotatable about the pin; and

wherein the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when the platform is positioned with respect to the hubs and the joists in the final position.

35. (~~Previously Presented~~Currently Amended) The work platform support structure of claim 34 wherein, when connected, the second joist, the third joist or the fourth joist rotates with respect to the first hub or the second hub.

36. (~~Previously Presented~~Currently Amended) The work platform support structure of claim 35 wherein, when connected, the second

joist, the third joist or the fourth joist translates with respect to the first joist, the first hub or the second hub.

37. (~~Previously Presented~~Currently Amended) The work platform support structure of claim 36 wherein, when connected, the second joist, the third joist or the fourth joist pivots with respect to the third hub or the fourth hub.

38. (~~Previously Presented~~Currently Amended) A work platform structure comprising:

a first hub and joist assembly comprising pair of hubs ~~connected~~connectable in fixed relation to each other using a first joist; ~~and~~

a second hub and joist assembly comprising a pair of hubs ~~connected~~connectable to each other using a second joist, the pair of hubs further ~~connected~~connectable to third and fourth joists;

wherein, when connected, the second hub and joist assembly articulates with respect to the first hub and joist assembly ~~to receive and support a work platform;~~

wherein, when connected, each of the joists in the first and the second hub and joist assemblies extends substantially perpendicularly with respect to an axis of at least one of the respective first, second, third and fourth hubs about which the respective joists rotate;

wherein, when connected, each of the joists in the first and the second hub and joist assemblies is substantially co-planar with respect to each other in an initial position and an extended position; and

wherein at least one of the joists is configured to be connected with at least one of the hubs using a pin ~~such that to~~ provide free rotation of the at least one joist ~~and~~ with respect to ~~the~~ at the least one hub ~~are freely rotatable about the pin; and~~

wherein the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when the platform is positioned with respect to the hubs and the joists in the extended position.

39. (~~Previously Presented~~Currently Amended) The work platform support structure of claim 38 wherein, when connected, at least one of the second, the third and the fourth joists rotates with respect to at least one of the first hub and the second hub; wherein, when connected, at least one of the second, the third and the fourth joists translates with respect to at least one of the first joist, the first hub and the second hub; and wherein, when connected, at least one of the second, the third and the fourth joists pivots with respect to the third hub and the fourth hub.

40. (~~Previously Presented~~Currently Amended) A work platform support structure comprising:

~~a stationary~~ first joist having fixed first and second hubs ~~connected~~connectable thereto;

a rotatable second joist ~~connected~~connectable to either the first or the second hub,

a rotatable third joist ~~connected~~connectable to the other of the first or the second hub;

a third hub ~~connected~~connectable to either the rotatable second joist or the rotatable third joist and a fourth hub ~~connected~~connectable to the other of the second or the third joist; and

a fourth joist ~~connected~~connectable to the third and the fourth hubs;

wherein, when connected, the second, third and fourth joists and the third and fourth hubs together articulate with respect to the stationary first joist and fixed first and second hubs from an initial position to a final position in which a work platform can be received and supported;

wherein at least one of the joists is to be connected with at least one of the hubs using a pin ~~such that~~to provide free rotation of the at least one joist and with respect to the at the least one hub~~are freely rotatable~~ about the pin;

wherein the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when the platform is positioned with respect to the hubs and the joists in the final position;

wherein each of the first, second, third and the fourth hubs comprises a first surface with a first set of openings; a second surface substantially parallel to said first surface and having a second set of openings; and a structural element connected between the first surface and the second surface, such that each one of the openings in the first set of openings is co-axial with a respective one of the openings in the second set of openings; and

wherein the first, second, third and the fourth joists are substantially co-planar with respect to each other in both the initial and the final positions.

41. (~~Previously Presented~~Currently Amended) The work platform support structure of claim 40 wherein, when connected, the second joist, the third joist or the fourth joist translates with respect to the first joist, the first hub or the second hub.

42. (~~Previously Presented~~Currently Amended) The work platform support structure of claim 41 wherein, when connected, the second joist, the third joist or the fourth joist pivots with respect to the third hub or the fourth hub.

43. (~~Previously Presented~~Currently Amended) A work platform support structure comprising:

a first hub and joist assembly comprising a ~~stationary~~ first joist and a pair of hubs ~~connected~~connectable to the first joist; and

a second hub and joist assembly comprising a rotatable second joist, a rotatable third joist and a translatable fourth joist, the second, third and fourth joists ~~connected~~connectable together using a pair of hubs;

wherein at least two of the three joists of the second hub and joist assembly are ~~connected~~connectable to the hubs of the first hub and joist assembly;

wherein, when connected, the second hub and joist assembly articulates with respect to the first hub and joist assembly in order to receive and support a work platform;

wherein each of the hubs in the first and the second hub and joist assemblies comprises a first surface with a first set of openings; a second surface substantially parallel to said first surface and having a second set of openings; and a structural element connected between the first surface and the second surface, such that each one of the openings in the first set of openings is co-axial with a respective one of the openings in the second set of openings;

wherein, when connected, each of the joists in the first and the second hub and joist assemblies is substantially co-planar with respect to each other in a first initial position and a second extended position;

wherein at least one of the joists is configured to be connected with at least one of the hubs using a pin ~~such that to~~ provide free rotation of the at least one joist ~~and with respect to~~ the at ~~the~~ least one hub ~~are freely rotatable~~ about the pin; and

wherein the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when the platform is positioned with respect to the hubs and the joists in the extended position.

44. (Previously Presented Currently Amended) The work platform support structure of claim 43 wherein, when connected, the second joist, the third joist or the fourth joist pivots with respect to the third hub or the fourth hub.

53. (Currently Amended) The system of Claim 11, wherein, when interconnected, each of the plurality of joists extends

substantially perpendicularly with respect to an axis of at least one of the respective plurality of hubs about which the respective joists rotate.

54. (~~Previously Presented~~Currently Amended) The work platform support structure of Claim 30, wherein each of the first, second, third and the fourth hubs comprises:

a first surface with a first set of openings;

a second surface substantially parallel to said first surface, said second surface having a second set of openings; and

a structural element connected between said first surface and said second surface;

wherein each one of the openings in the first set of openings is co-axial with a respective one of the openings in the second set of openings.

55. (~~Previously Presented~~Currently Amended) The work platform support structure of Claim 40, wherein, when connected, each of the first, second, third and the fourth joists extends substantially perpendicularly with respect to an axis of at least one of the respective first, second, third and the fourth hubs about which the respective joists rotate.

58. (~~Previously Presented~~Currently Amended) A work platform assembly comprising:

first, second, third and fourth hubs, each of the hubs comprising a first surface with a first set of openings; a second surface substantially parallel to said first surface and having a

second set of openings, such that each one of the openings in the first set of openings is co-axial with a respective one of the openings in the second set of openings; and a structural element connected between the first surface and the second surface such that a longitudinal axis of the structural element is at least substantially normal to the planes of the first and the second surfaces;

first, second, third and fourth joists ~~is~~adapted for operable association with the first, second, third and fourth hubs, such that, when so associated, each of the first, second, third and the fourth joists extends substantially perpendicularly with respect to an axis of at least one of the respective first, second, third and the fourth hubs about which the respective joists can rotate;

a work platform that is adapted to be positioned upon at least one of the first, second, third and the fourth joists, at least one of the first, second, third and the fourth hubs, or a combination thereof ~~for forming~~, when the hubs and joists are operably associated, to form a work platform system;

wherein, when operably associated, (i) the first hub is connected in fixed relation to the second hub using the first joist; (ii) the third hub is connected to the fourth hub using the second joist- and (iii) the third and the fourth joists are connected to the first and the third, and the second and the fourth hubs respectively;

wherein, when operably associated, at least one of the second, third and the fourth joists, and at least one of the third and the fourth hubs articulate from an initial position to a final position by at least one of translating, rotating and pivoting with respect

to the first and the second hubs and the first joist to obtain a closed-loop structure such that the first and the third joists are parallel or substantially parallel to the second and the fourth joists respectively in the final position upon articulation;

wherein each of the first, second, third and fourth joists is substantially co-planar in the initial and the final positions;

wherein at least one of the joists is configured to be connected with at least one of the hubs using a pin ~~such that to~~ provide free rotation of the at least one joist ~~and with respect to~~ the at ~~the~~ least one hub ~~are freely rotatable~~ about the pin; and

wherein the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when the platform is positioned with respect to the hubs and the joists in the final position..

59. (Currently Amended) The work platform assembly of Claim 58, wherein the work platform system is capable of supporting at least four times an intended live load applied, or transmitted upon the work platform system in the final position.

74. (~~Previously Presented~~Currently Amended) A work platform support structure comprising:

a first hub ~~connected~~connectable in fixed relation to a second hub using a first joist; ~~and~~ —

a third hub ~~connected~~connectable to a fourth hub using a second joist, the third and the fourth hubs further

~~connected~~connectable to the first and the second hubs using third and fourth joists;

wherein, when connected, the second, the third and the fourth joists, and the third and the fourth hubs articulate with respect to the first and second hubs and the first joist to ~~receive and support a work platform; and~~ an extended or final position;

wherein at least one of the joists is ~~connected~~connectable with at least one of the hubs using a pin ~~such that~~ to provide free rotation of the at least one joist ~~and with respect to the~~ at the least one hub ~~are freely rotatable~~ about the pin; and

wherein the free rotation is restricted by at least one of: i) an additional pin that is to be located proximate a perimeter of the at least one hub; and ii) at least a portion of a work platform when the platform is positioned with respect to the hubs and the joists in the extended or final position.

75. (~~Previously Presented~~Currently Amended) The work platform support structure of Claim 74 wherein at least one of the hubs comprises:

a first surface with a first set of openings;

a second surface parallel or substantially parallel to said first surface, said second surface having a second set of openings; and

a structural element connecting said first surface and said second surface;

wherein at least one of the openings of the first set of openings is co-axial with at least one of the openings in the second set of openings.

76. (~~Previously Presented~~Currently Amended) The work platform support structure of Claim 75 wherein the at least one joist is connected to the at least one hub via the co-axial openings.

77. (New) The work platform support structure of claim 74, further comprising said work platform.

78. (New) The work platform support structure of claim 74, wherein the first, second, third and fourth hubs and joists, respectively, are connected.

Claims 28, 29, 46-48, 50, 52, 56 and 63-73. cancel the claims.

As amended, Claims 2-11, 13-24, 30-44, 53-55, 58-60 and 74-78 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose, either alone or in combination the limitations of the claim, in particular the limitations drawn to restricting free rotational movement of the system.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM V. GILBERT whose telephone number is (571)272-9055. The examiner can normally be reached on Monday - Friday, 08:00 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571.272.6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./
Supervisory Patent Examiner, Art Unit
3635

/W. V. G./
Examiner, Art Unit 3635